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Kenji Fukasawa

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MARTINE PENILLA & GENCARELLA, LLP
710 LAKEWAY DRIVE
SUITE 200
SUNNYVALE, CA 94085

EXAMINER

CASCHERA, ANTONIO A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/072,266	Applicant(s) FUKASAWA, KENJI	
	Examiner Antonio A. Caschera	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-38, 43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-38, 43 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 10/08/08.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Claim Objections

3. Claim 24 is objected to because of the following informalities:
 - a. Claim 24 comprises the preamble, "A memory according to claim 14..." which should read, "A method according to claim 14..." since claim 14 recites, "A method for generating image data..."

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 25 and 29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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In reference to claims 25 and 29, the language of the claims raise questions as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Specifically, newly implemented practices and procedures directed towards the analysis of claim language as per 35 U.S.C. 101 question the “mechanism” elements of the claims as per the claimed “device” found in the preamble of claims 25 and 29. The specification provides evidence enabling one of ordinary skill in the art to reasonably interpret the “mechanism” elements of the claims as software routines/modules/etc. (see paragraphs 22, 24 and further claims 12 & 28). Therefore, such claimed elements are software per se, which fails to fall within a statutory category of invention and necessitates the rejection of claims 25 and 29. Note, other “device” type claims comprise elements that are a physical part of the invention (i.e. an image data generating mechanism which is further described as a digital still camera, in paragraph 34 of the specification) and therefore the combination of elements of these claims can be constituted a machine within the meaning of 35 U.S.C. 101..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-3, 9, 10, 12-16, 22-30, 33-35, 38, 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al. (U.S. Patent 5,982,416) in view of Inoue et al. (U.S. Patent 6,273,535 B1).

In reference to claims 1, 13, 14, 25-27 and 45, Ishii et al. discloses an image processing apparatus and method performing color matching processing of image data along with device profile data transfers (see column 1, lines 6-9). Ishii et al. discloses the apparatus comprising of an image pickup unit and scanner which both generate image data into the system (see column 3, lines 51-61). Ishii et al. also discloses a data reception unit receiving data from the image pickup unit and scanner device (see column 4, lines 11-16). Ishii et al. discloses a CMS process unit which comprises of input and output device color matching processes coupled to both input and output device profile storage units (see column 4, lines 34-39 and #14 and 15 of Figure 1 and #14, 15, 23, 24, 26 and 25 of Figure 3). Ishii et al. further goes on to disclose the output profile data possibly being conversion data including color space compression instructions according to color reproducible by the output device (see column 4, lines 50-53). Note, the Office interprets the CMS process unit acting functionally equivalent to the output control data acquisition mechanism of Applicant's claims since the output device CMS unit (#24 of Figure 3) acquires output device color reproducible data defining the conditions set forth by the output device to faithfully display image data. Ishii et al. also discloses implementing multiple output devices, therefore requiring multiple output device profiles, each profile associated with a specific output device (see column 4, lines 20-30, columns 4-5, lines 65-4 and #21 and 22 of Figure 1). Note, the Office interprets Ishii et al. to disclose outputting to an output device when Ishii et al. discloses outputting profile characteristic data multiplexed with image data (see column 4, lines

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18-30 and column 5, lines 21-24 and Figure 4). Also, Ishii et al. explicitly discloses embedding characteristic data (profile data) based on the type of output device with image data (see column 7, lines 32-34). Ishii et al. discloses a data multiplexing unit in a transmission-side configuration of the device, for embedding color space characteristic data, in a file with image data and transmitting this file as output (see column 7, lines 20-45 and Figures 8 and 16). Note, Ishii et al. also discloses alternatively, embedding characteristic data based on the type of output device, with image data (see column 7, lines 32-34). Although Ishii et al. discloses outputting profile characteristic data including color space compression instructions, Ishii et al. does not explicitly disclose outputting output control data designating image processing conditions to be carried out by each of a plurality of output devices. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.). Further, in view of the limitation of "...wherein each of said output devices is separated from said image data generating device," although one may interpret the image processing apparatus/system of Ishii et al. as comprising

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image pickup, host computer and output devices as one apparatus/system (see Figure 1), Inoue et al. surely discloses the digital still camera and printer, i.e. image input and output devices, as separate devices (see at least, Figure 13). Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image pickup unit and host computer of Ishii et al. separate from the output devices of Ishii et al. as the mere fact that a given structure as integral does not preclude its consisting of various elements thereby making the separation of such processing elements of Ishii et al. solely a matter of engineering design choice (see *In re Larson*, 144 USPQ 347 (CCPA 1965) and *Nerwin v. Erlichman*, 168 USPQ 177, 179 (PTO Bd. of Int. 1969)). Although Inoue et al. discloses transmitting both image data and image additional data, comprising the printing processing parameters in color mode and processing information, to the printing device as per a printer request (see column 4, lines 35-56), Inoue et al. does not explicitly disclose embedding such data together in a single file. It would have been obvious to one of ordinary skill in the art at the time the invention was made to embed such closely related data together in some sort of single piece of data for transmission or storage in order to 1) better organize the storage/retrieval of data in memory thereby creating faster memory accesses and a more efficient system and 2) conserve bandwidth by allowing for numerous compression techniques to be applied to the embedded data thereby creating a more efficient computing system overall. Note, the claims, except for claim 45, specifically recite "...generating image data to be outputted by one or more of a plurality of output devices..." (see lines 1-2 of the claims) which the Office interprets Ishii et al. to disclose generating to output to multiple devices (i.e. the printer and monitor of Ishii et al.) while Inoue et al. discloses outputting a single output device (i.e. printer). (see *Response to Arguments* below)

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In reference to claims 2 and 15, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 1 and 14 respectively above. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14). Note, the Office takes the broadest interpretation of the claims and therefore selects the scenario, as defined by the limitation of "...outputting data to one or more of a plurality of output devices..." (see claims 1 and 14 from which claims 2 and 15 depend upon respectively) that only one output device is chosen for outputting data thereto. Therefore, in view of such an interpretation and further since there is only a single output printer device as parameterized by the processing commands of the image additional information in Inoue et al., the Office interprets the combination of Ishii et al. and Inoue et al. to disclose all of the claim limitations as applied to claims 2 and 15 respectively.

In reference to claims 3 and 16, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 1 and 14 respectively above. Ishii et al. discloses implementing multiple output devices, therefore requiring multiple output device profiles, each profile associated with a specific output device (see column 4, lines 20-30, columns 4-5, lines 65-4 and #21 and 22 of Figure 1). The Office interprets the output device corresponding CMS process unit acting functionally equivalent to the designating mechanism of Applicant's claims since it must choose the correct profile for each output device designated to received image data (see column 4, lines 20-30).

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In reference to claims 9 and 22, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 1 and 14 respectively above in addition, Inoue et al. discloses an image memory for storing image data along with image additional information which comprises the color mode information and color processing information as previously discussed (see column 4, lines 6-16 and #5, 6 of Figure 1). Inoue et al. further discloses an output device, in this case a printer device, requesting a digital camera transfer image data and image additional information stored in the image memory via a communication unit (see column 4, lines 36-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.).

In reference to claims 10 and 23, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 1 and 14 respectively above. Ishii et al. discloses a CMS process unit which comprises of input and output device color matching processes coupled to both input and output device profile storage units (see column 4, lines 34-39 and #14 and 15 of Figure 1 and #14, 15, 23, 24, 26 and 25 of Figure 3). Inoue et al. discloses an image memory for storing image data along with image additional information which comprises the color mode information and color processing information as previously discussed (see column 4, lines 6-16 and #5, 6 of Figure 1). Inoue et al. further discloses the input device, or digital camera, storing the image data along with the image additional information, which provides color processing to be

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performed, the image additional information comprising color mode information and color processing information which are explicitly stated as being related to printing and are obtained/generated upon image sensing (see column 4, lines 6-19, 42-53 and column 5, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.).

In reference to claims 12 and 28, claims 12 and 28 are equivalent in scope to claims 1, 13, 14 and 25-27 and are therefore rejected in a similar manner. In addition, to the above rationale as applied to claim 1, Ishii et al. also discloses the apparatus comprising a computer that includes RAM and ROM memories for storing a program to perform the above CMS methods (see column 4, lines 5-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.). (see *Response to Arguments* below)

In reference to claim 24, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claim 14 above. Ishii et al. discloses the apparatus comprising of an image pickup unit and scanner which both generate image data into the system (see column 3, lines 51-61). Ishii et

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al. also discloses a data reception unit receiving data from the image pickup unit and scanner device (see column 4, lines 11-16).

In reference to claims 29, 33 and 34, Ishii et al. discloses an image processing apparatus and method performing color matching processing of image data along with device profile data transfers (see column 1, lines 6-9). Ishii et al. discloses the apparatus comprising of an image pickup unit and scanner which both generate image data into the system (see column 3, lines 51-61). Ishii et al. also discloses a data reception unit receiving data from the image pickup unit and scanner device (see column 4, lines 11-16). Ishii et al. discloses a CMS process unit which comprises of input and output device color matching processes coupled to both input and output device profile storage units (see column 4, lines 34-39 and #14 and 15 of Figure 1 and #14, 15, 23, 24, 26 and 25 of Figure 3). Ishii et al. further goes on to disclose the output profile data possibly being conversion data including color space compression instructions according to color reproducible by the output device (see column 4, lines 50-53). Note, the Office interprets the CMS process unit acting functionally equivalent to the output control data acquisition mechanism of Applicant's claims since the output device CMS unit (#24 of Figure 3) acquires output device color reproducible data defining the conditions set forth by the output device to faithfully display image data. Ishii et al. also discloses implementing multiple output devices, therefore requiring multiple output device profiles, each profile associated with a specific output device (see column 4, lines 20-30, columns 4-5, lines 65-4 and #21 and 22 of Figure 1). Note, the Office interprets Ishii et al. to disclose outputting to an output device when Ishii et al. discloses outputting profile characteristic data multiplexed with image data (see column 5, lines 21-24 and Figure 4). Also, Ishii et al. explicitly discloses embedding characteristic data (profile

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data) based on the type of output device with image data (see column 7, lines 32-34). Ishii et al. discloses a data multiplexing unit in a transmission-side configuration of the device, for embedding color space characteristic data, in a file with image data and transmitting this file as output (see column 7, lines 20-45 and Figures 8 and 16). Note, Ishii et al. also discloses alternatively, embedding characteristic data based on the type of output device, with image data (see column 7, lines 32-34). Although Ishii et al. discloses outputting profile characteristic data including color space compression instructions, Ishii et al. does not explicitly disclose outputting output control data designating image processing conditions to be carried out by each of a plurality of output devices. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.). Further, in view of the newly amended claim limitation of "...wherein each of said plurality of output devices is separated from said image data generating device," although one may interpret the image processing apparatus/system of Ishii et al. as comprising image pickup, host computer and output devices as one

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apparatus/system (see Figure 1), Inoue et al. surely discloses the digital still camera and printer, i.e. image input and output devices, as separate devices (see at least, Figure 13). Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the image pickup unit and host computer of Ishii et al. separate from the output devices of Ishii et al. as the mere fact that a given structure as integral does not preclude its consisting of various elements thereby making the separation of such processing elements of Ishii et al. solely a matter of engineering design choice (see *In re Larson*, 144 USPQ 347 (CCPA 1965) and *Nerwin v. Erlichman*, 168 USPQ 177, 179 (PTO Bd. of Int. 1969)). Note, the Office takes the broadest interpretation of the claims and therefore selects the scenario, as defined by the limitation of "...outputting data to one or more of a plurality of output devices..." that only one output device is chosen for outputting data thereto. Therefore, in view of such an interpretation and further since there is only a single output printer device as parameterized by the processing commands of the image additional information in Inoue et al., the Office interprets the combination of Ishii et al. and Inoue et al. to disclose all of the claim limitations as applied to claims 29, 33 and 34 respectively. (see *Response to Arguments* below)

In reference to claims 30 and 35, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 29 and 34 respectively above. Ishii et al. discloses a CMS process unit which comprises of input and output device color matching processes coupled to both input and output device profile storage units (see column 4, lines 34-39 and #14 and 15 of Figure 1 and #14, 15, 23, 24, 26 and 25 of Figure 3). Note, the Office believes the apparatus of Ishii et al. inherently acquires new or different profile data when the output device, the target device receiving the processed image data, is changed. Inoue et al. discloses an image memory

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for storing image data along with image additional information which comprises the color mode information and color processing information as previously discussed (see column 4, lines 6-16 and #5, 6 of Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.).

In reference to claim 38, claim 38 is equivalent in scope to claims 29, 33 and 34 and is therefore rejected in a similar manner. In addition to the rationale as applied to claims 29, 33 and 34, Ishii et al. also discloses the apparatus comprising a computer that includes RAM and ROM memories for storing a program to perform the above CMS methods (see column 4, lines 5-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.). (see *Response to Arguments* below)

In reference to claim 43, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claim 1 above. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color

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mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14).

6. Claims 4-8, 17-21, 31, 32, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al. (U.S. Patent 5,982,416), Inoue et al. (U.S. Patent 6,273,535 B1) and further in view of Kohler et al. (U.S. Patent 5,646,752).

In reference to claims 4, 17, 31, 32, 36 and 37, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 2, 15, 29, 30 and 34 respectively above however, neither Ishii et al. or Inoue et al. explicitly disclose identifying at least one classification selected from a group of classifications consisting of output device category, output device format, manufacturer, and output device model name. Kohler et al. discloses a system for modifying device profile tags (see column 1, lines 64-67 of Kohler et al.). Kohler et al. discloses the profiles comprising of a “DeviceModel” tag stored within the profile (see column 9, lines 11-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device profile formatting of Kohler et al. with the output processing setting techniques of Inoue et al. and CMS profile processing techniques of Ishii et al. in order to allow for customizable data to be stored and represented in device profiles, aiding in color transformation processing of image data (see column 2, lines 7-41 of Kohler et al.). Note, in reference to claims 31 and 36, the Office interprets that the tag information of Kohler et al. inherently identifies and is designated to each device. Note, in reference to claim 32 and 37, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device profile formatting of Kohler with the output processing setting techniques

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of Inoue et al. and CMS profile processing techniques of Ishii et al., enabling the output device CMS processing unit of Ishii et al. to select the correct device profile based on a device name or model, to aid in the CMS processing of image data by allowing for customizable data to be stored (device model/name information) and accessed in the device profiles (see column 2, lines 7-41 of Kohler et al.).

In reference to claims 5, 6, 18 and 19, Ishii et al. and Inoue et al. disclose all of the claim limitations as applied to claims 3 and 16 above however, neither Ishii et al. or Inoue et al. explicitly disclose the output device CMS process unit acquiring profile or device data with reference to a classification level. Kohler et al. discloses a system for modifying device profile tags (see column 1, lines 64-67 of Kohler et al.). Kohler et al. discloses the profiles comprising of a “DeviceModel” tag stored within the profile (see column 9, lines 11-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device profile formatting of Kohler with the output processing setting techniques of Inoue et al. and CMS profile processing techniques of Ishii et al., enabling the output device CMS processing unit of Ishii et al. to select the correct device profile based on a device name or model, to aid in the CMS processing of image data by allowing for customizable data to be stored (device model/name information) and accessed in the device profiles (see column 2, lines 7-41 of Kohler et al.).

In reference to claims 7 and 20, Ishii et al., Inoue et al. and Kohler et al. disclose all of the claim limitations as applied to claims 4 and 17 respectively above. Ishii et al. also discloses implementing multiple output devices, therefore requiring multiple output device profiles, each profile associated with a specific output device (see column 4, lines 20-30, columns 4-5, lines

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65-4 and #21 and 22 of Figure 1). Kohler et al. discloses the profiles comprising of a “DeviceModel” tag stored within the profile (see column 9, lines 11-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the device profile formatting of Kohler with the output processing setting techniques of Inoue et al. and CMS profile processing techniques of Ishii et al., enabling the output device CMS processing unit of Ishii et al. to select the correct device profile based on a device name or model, to aid in the CMS processing of image data by allowing for customizable data to be stored (device model/name information) and accessed in the device profiles (see column 2, lines 7-41 of Kohler et al.).

In reference to claims 8 and 21, Ishii et al., Inoue et al. and Kohler et al. disclose all of the claim limitations as applied to claims 7 and 20 respectively above. Neither Ishii et al., Inoue et al. or Kohler et al. explicitly disclose the output formats including xerographic printing, sublimation printing, ink jet printing, CRT display, LCD display, projection display, transmissive display, and reflective display formats. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the above specific output formats in the CMS profile format and processing techniques of Ishii et al., Inoue et al. and Kohler et al.. Applicant has not disclosed that supporting these specific output formats provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant’s invention to perform equally well with the monitor and printer profiles of Ishii et al. and Inoue et al. because the Office interprets the exact output format that image data is transformed into to be a matter decided by the inventor as to which best suits the applicant at hand. Further, the specific manner in which the image data is

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ultimately displayed or printed is seen to provide no immediate criticality to the application at hand. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Ishii et al., Inoue et al. and Kohler et al. to obtain the invention as specified in claims 8 and 21.

Response to Arguments

7. Applicant's arguments, see page 14 of Applicant's Remarks, filed 10/08/08, with respect to objection of claims 1, 12-14, 25-29, 33, 34, 38 and 45 have been fully considered and are persuasive. The objection of these claims has been withdrawn since amendments to the claims remedy the prior issues.

8. Applicant's arguments, see pages 14-15 of Applicant's Remarks, filed 10/08/08, with respect to 35 USC 112, 1st paragraph rejection of claims 12, 28 and 38 have been fully considered and are persuasive. The 35 USC 112, 1st paragraph rejection of these claims has been withdrawn since Applicant's arguments point out and equate the "computer-readable storage medium" of the claims to the recited ROM of paragraph 37 of the specification.

9. Applicant's arguments filed 10/08/08 have been fully considered but they are not persuasive.

In reference to the claims 1-10, 12-38, 43 and 45, Applicant argues that the rejection based upon Ishii et al. and Inoue et al. is flawed because the host computer of Ishii does not transmit an image file containing output control data and image data to a printer (see page 16, 2nd paragraph of Applicant's Remarks). In response, the Office firmly disagrees and restates, Ishii et al. discloses a CMS process unit which comprises of input and output device color

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matching processes coupled to both input and output device profile storage units (see column 4, lines 34-39 and #14 and 15 of Figure 1 and #14, 15, 23, 24, 26 and 25 of Figure 3). Ishii et al. further goes on to disclose the output profile data possibly being conversion data including color space compression instructions according to color reproducible by the output device (see column 4, lines 50-53). Ishii et al. also discloses implementing multiple output devices, therefore requiring multiple output device profiles, each profile associated with a specific output device (see column 4, lines 20-30, columns 4-5, lines 65-4 and #21 and 22 of Figure 1). Also, Ishii et al. explicitly discloses embedding characteristic data (profile data) based on the type of output device with image data (see column 7, lines 32-34). Ishii et al. discloses a data multiplexing unit in a transmission-side configuration of the device, for embedding color space characteristic data, in a file with image data and transmitting this file as output (see column 7, lines 20-45 and Figures 8 and 16). Further, it can be seen above that the Office introduces the Inoue et al. reference to teach outputting output control data designating image processing conditions to be carried out by each of a plurality of output devices. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the output processing setting techniques of Inoue et al. with the CMS profile processing techniques of Ishii et al. in order to allow for an output device of an image reproduction system to perform various

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processing upon image data optimized via embedded data resulting from input parameters yielding an optimal output result (see column 4, lines 53-56 of Inoue et al.). Therefore, Applicant's Remarks seem to attack the Ishii et al. reference alone instead of the combination of Ishii et al. and Inoue et al. for such a limitation. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, Applicant argues that Ishii et al.'s pickup unit transmits only image data to host computer and does not transmit any output control data (see 3rd paragraph of page 16 of Applicant's Remarks). The Office responds by stating, it is noted that the features upon which Applicant relies (i.e., the image data generating mechanism transmitting output control data) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Next, Applicant argues that the configuration of the Inoue et al. reference stores printing control information in a printer and a digital still camera only transmits image additional information representing image sensing conditions to the printer (see page 17, 2nd paragraph of Applicant's Remarks). The Office firmly disagrees as column 4, lines 6-19, column 5, lines 11-14 and Figure 2 explicitly show the image additional information of the camera including resolution information, color mode information and color processing information (see #13-1-13-

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3), "...which are particularly related to printing and obtained upon image sensing" (see column 5, lines 11-14 of Inoue et al.).

Applicant also argues that the camera of Inoue et al. is incapable of controlling the selection of color printing conditions made by the printer (see page 17, 2nd paragraph of Applicant's Remarks). The Office firmly disagrees as again, column 4, lines 6-19, column 5, lines 11-14 and Figure 2 explicitly show the image additional information of the camera including resolution information, color mode information and color processing information (see #13-1-13-3), "...which are particularly related to printing and obtained upon image sensing" (see column 5, lines 11-14 of Inoue et al.). This suggests to one of ordinary skill in the art that the printer must, at least, examine and interpret the resolution information, color mode information and color processing information before printing image data thereby inherently controlling the processing conditions of the printer/output device. Further, Applicant's above statement seems to imply that the output control data mechanism of the claims manages the control of the printing device/output devices, however, the claims, as currently written, seem to only recite providing control information to the output/devices without explicitly managing the processing on the output device side. One of ordinary skill in the art clearly draws a distinction from these two and would surely believe that the Applicant's invention, as claimed, recites only providing control information and not taking on the management of output devices.

Further, Applicant states that Inoue et al. discloses only a one-on-one connecting state between the camera and printer and does not suggest the technical concept of providing an image processing device with different output control data for multiple different output devices while Ishii simply discloses techniques in a host device (see page 17, last paragraph thru page 18, 1st

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paragraph of Applicant's Remarks). In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As seen above, the Office introduced the Inoue et al. reference to teach outputting output control data designating image processing conditions to be carried out by each of a plurality of output devices. Inoue et al. discloses an image forming system and apparatus that stores image information with parameters of color processing to be performed by an output device, in this case, the output device being a printer, the color processing parameters being color mode information and color processing information which are explicitly stated as being related to printing and are obtained upon image sensing (see column 1, lines 6-10, column 4, lines 6-19, 42-53 and column 5, lines 11-14). It is the combination of Ishii et al. and Inoue et al. who teach the above claim limitations as argued by Applicant which the Applicant seems to disregard as per this argument.

Lastly, Applicant argues that Ishii et al. does not support the Examiner's statement, that the invention of Ishii discloses an embodiment that outputs image data with color profile related thereto to multiple output devices (see 3rd paragraph, page 18 of Applicant's Remarks). The Office firmly disagrees and points to Figure 4, column 4, lines 20-39 wherein Ishii et al. clearly discloses embedding image data and color space characteristic data for transmission to output devices. Ishii et al. further discloses such color space data as stored profile data relating device dependent to device independent color spaces (see column 4, lines 40-53). Therefore, the Office interprets Ishii et al. to support such limitations as argued by Applicant.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

/Antonio A Caschera/

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Temporary Full Signatory Authority

11/19/08